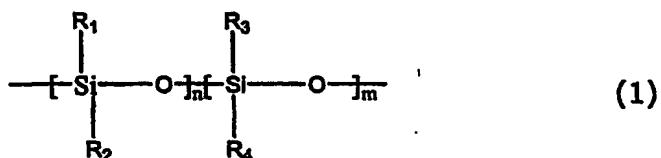


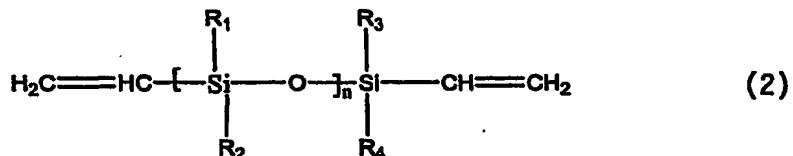
**CLAIMS:**

1. A method of manufacturing a replica, which method comprises the provision of a curable resin composition between a mold and a substrate or a blank, carrying out a UV-light initiated or thermal curing treatment and removing the replica thus manufactured from the mold, which replica comprises the substrate and the reproduction of the mold provide  
5 thereon, characterized in that, the resin composition used being a silicon based reactive material.
2. A method as claimed in claim 1, characterized in that the resin composition comprises



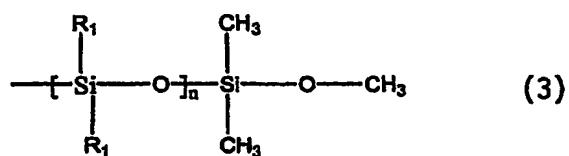
10

and



wherein  $R_1, R_2, R_3, R_4$  = hydrogen,  $C_1-C_{10}$ -alkyl, vinyl, phenyl, hydroxide,  
15 amino, halogen atom, and at least one of  $R_1, R_2, R_3$  and  $R_4$  is hydrogen.

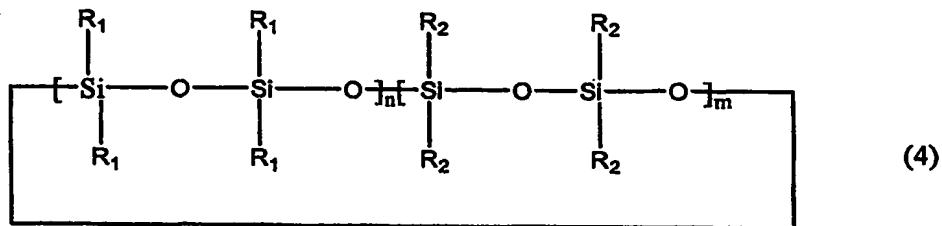
3. A method as claimed in claim 2, characterized in that the resin composition further comprises



wherein R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub> and R<sub>4</sub> have the same meaning as disclosed in claim 2.

4. A method according to claims 2-3, characterized in that the resin composition further comprises

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wherein R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub> and R<sub>4</sub> have the same meaning as disclosed in claim 2.

- 10 5. A method according to claims 2-4, characterized in that component (1) is present in an amount of 40-70 wt.%, based on the total weight of the curable resin composition.

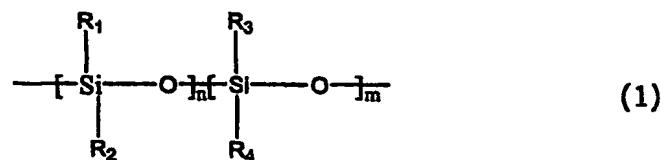
- 15 6. A method according to claims 2-5, characterized in that component (2) is present in an amount of 15-40 wt.%, based on the total weight of the curable resin composition.

- 20 7. A method according to claims 2-6, characterized in that component (3) is present in an amount of 10-30 wt.%, based on the total weight of the curable resin composition.

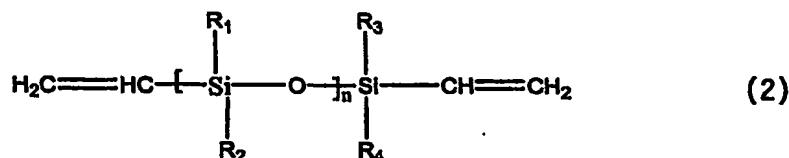
- 25 8. A method according to claims 2-7, characterized in that component (4) is present in an amount of 1.0-5.0 wt.%, based on the total weight of the curable resin composition.

9. A replica obtained by carrying out a UV light-initiated or thermal curing treatment of a mixture comprising a silicon based reactive material.

- 30 10. A replica as claimed in claim 9, characterized in that the silicon based reactive material comprises

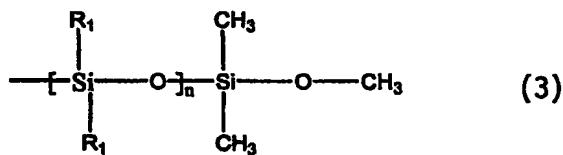


and



5 wherein  $R_1, R_2, R_3, R_4$  = hydrogen,  $C_2-C_{10}$ -alkyl, vinyl, phenyl, hydroxide, amino, halogen atom, and at least one of  $R_1, R_2, R_3$  and  $R_4$  is hydrogen.

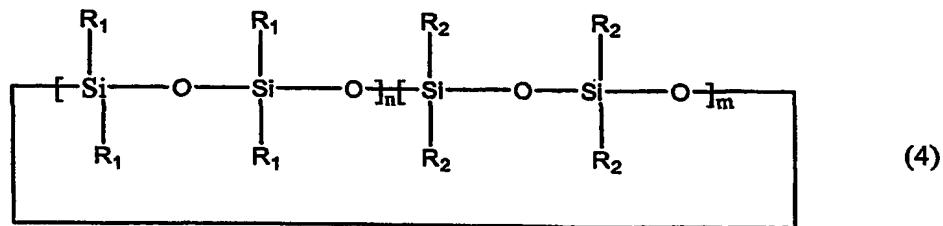
11. A replica as claimed in claim 10, characterized in that the silicon based reactive material further comprises



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wherein  $R_1, R_2, R_3$  and  $R_4$  have the same meaning as disclosed in claim 10.

12. A replica as claimed in claims 10-11, characterized in that the silicon based reactive material further comprises



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wherein  $R_1, R_2, R_3$  and  $R_4$  have the same meaning as disclosed in claim 10.

13. A replica as claimed in claims 9-12, characterized in that its transparency is at least 20%, when replicated on a glass material being transparent for the applied wavelength,

measured at a thickness of 100  $\mu\text{m}$ , an intensity of 100  $\mu\text{W}/\text{cm}^2$  and a wavelength of 190-400 nm, during a period of at least 50 hours.

14. A replica as claimed in claims 9-13, characterized in that its transparency is at  
5 least 90 %, when replicated on a glass material being transparent for the applied wavelength,  
measured at a thickness of 100  $\mu\text{m}$ , an intensity of 0.5 mW/cm<sup>2</sup> and a wavelength of 190-400 nm, during a period of at least 5000 hours.

15. A replica as claimed in claims 9-14, characterized in that it is not birefringent.

10 16. A replica as claimed in claims 9-15, characterized in that the replica obtained  
is an optical component.

15 17. A replica as claimed in claim 16, characterized in that the optical component  
obtained is an (a) spherical lens, a lens array, a prism, a grating or another relief structure for  
optical applications, or a combination thereof.